



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/696,932	10/30/2003	James F. McGuckin JR.	1255	1044
7590 NEIL D. GERSHON REX MEDICAL 1011 HIGH RIDGE RD Stamford, CT 06905				
EXAMINER WEBB, SARAH K				
ART UNIT		PAPER NUMBER		
3731				
MAIL DATE		DELIVERY MODE		
08/09/2010		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/696,932

Applicant(s)

MCGUCKIN ET AL.

Examiner

SARAH WEBB

Art Unit

3731

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 April 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-9, 11, 13-18, 21 and 22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-9, 11, 13-18, 21 and 22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB06)
Paper No(s)/Mail Date 4/7/09
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement filed 4/7/2009 fails to comply with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609 because it does not include the US patent or application number for the Thinnes et al. reference and a legible copy of each cited foreign reference was not submitted. It has been placed in the application file, but the information referred to therein has not been considered as to the merits. Applicant is advised that the date of any re-submission of any item of information contained in this information disclosure statement or the submission of any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the statement, including all certification requirements for statements under 37 CFR 1.97(e). See MPEP § 609.05(a).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

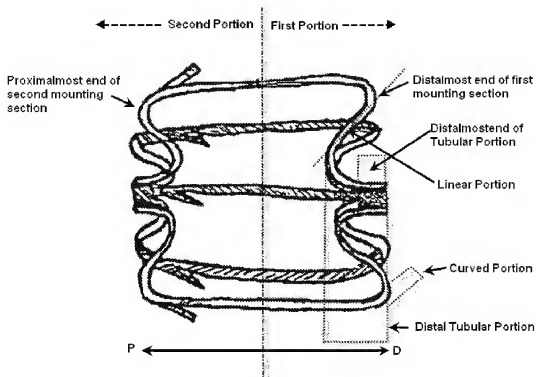
(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 2-7, 9, 11, 13, 14, 16, 18, 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Van der Burg et al (US Patent 6,994,092) in view of US Patent No. 6,443,972 (Bosma et al.)

Van der Burg discloses a vessel filter (Figures 5 and 8-9C) and method (Figure 1) comprising: a mounting section (middle section) having a proximal and distal end; two filtering sections (angled portions converging at tubular sections); the filtering sections defined by a plurality of longitudinal struts with ribs connecting adjacent struts; the device is self-expanding Nitinol (Column 4, Lines 11-15); the struts are spaced circumferentially about 60 degrees apart; a plurality of vessel engaging members (27) and/or roughening (Column 6, Lines 52-53); and the struts (in Figure 8) have an angled portion with a width less than the width of the straight portion of the mounting section.

Bosma et al disclose all of the claimed limitations except for the specific structure and location of the filtering section with regard to the mounting section. Van der Burg teaches (Figure 35; Column 18, Lines 34-55) that this type of expandable device for placement against a bodily tubular structure with an S-shape end portion provides an elongated mounting section, which improves contact area. Additionally, the S-shape portions act as springs. It would have been obvious to one having ordinary skill in the art at the time of invention to modify the filter sections of Bosma according to the structure taught in van der Burg in order to improve fixation within the blood vessel.

In regard to applicant's extensive claim language defining the relationship between the filter sections and mounting sections, see the Figure below depicting how the S-shape structure of van der Burg's filter section includes all the claimed components.



At least the two bottom struts on the right are shown distal of the distalmost point of the tubular section. While van der Burg does not explicitly illustrate that the ends of the tubular sections are closer to the center of the filter than the ends of the mounting sections for each strut, van der Burg does state that it is desirable to increase the contact area of the struts. One of ordinary skill in the art would be motivated to and capable of modifying the struts to increase the length of the parallel ribs, which would also cause the ends of the mounting sections to be further from the center of the filter than the ends of the tubular sections. This slight modification would also result in the ends of the tubular sections being in line with the linear portions.

3. Claims 8, 15, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bosma in view of Van der Burg et al and in further view of Gilson et al (US Patent Application Publication 2002/0058911).

The combination of Bosma and Van der Burg et al disclose and teach all of the claimed limitations except for struts out of phase. Gilson et al teach in Figures 15-22 out of phase struts as an appropriate structure for forming an expandable structure to act as an embolic filter. It would have been obvious to one having ordinary skill in the art at the time the invention was made to design the combination of Bosma and Van der Burg et al with out of phase struts as a matter of mere substitution for providing an expandable embolic filter with predictable results.

Response to Arguments

4. Applicant's arguments filed 4/7/09 have been fully considered but they are not persuasive. Applicant argues that the combination of Bosma et al. and van der Burg et al. is untenable, because the filter sections of Bosma and van der Burg extends in opposite directions. Bosma and van der Burg disclose tubular devices that are intended for deployment in the vascular system. The structures are very similar, as they both include a plurality of struts connected at both ends by tubular members. Van der Burg is relied upon for teaching an improved way to form the struts at the ends of the frame in order to improve the spring and contact area of the device. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a

sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

5. Applicant argues that van der Burg does not disclose all the claimed elements of the filter sections because van der Burg lacks a distalmost end point of a distal tubular portion proximal of distalmost end points of struts of the mounting section. As pointed out above, at least the two bottom struts on the right are shown distal of the distalmost point of the tubular section as well as the two back struts on the left side being proximal of the proximalmost point of the tubular section. While van der Burg does not explicitly illustrate that the ends of the tubular sections are closer to the center of the filter than the ends of the mounting sections for each strut, van der Burg does state that it is desirable to increase the contact area of the struts by elongating the apex (220), or longitudinal portion of the struts. One of ordinary skill in the art would be motivated to and capable of modifying the struts to increase the length of the parallel ribs, which would also cause the ends of the mounting sections to be further from the center of the filter than the ends of the tubular sections. This slight modification would also result in the ends of the tubular sections being in line with the linear portions.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SARAH WEBB whose telephone number is (571) 272-5749. The examiner can normally be reached on 9:00am - 5:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anh Tuan Nguyen can be reached on (571) 272-4963. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/S. W./
Examiner, Art Unit 3731

/Anh Tuan T. Nguyen/
Supervisory Patent Examiner, Art Unit 3731
8/7/10